

ABSTRACT OF THE DISCLOSURE

A water treatment system for treating water for use in improving the intestinal flora of livestock and poultry. The treated water for livestock and poultry use provides water with increased dissolved oxygen such that when the treated water is ingested, the livestock and poultry have increased lactic acid producing bacteria and decreased coliforms in the intestine. Increasing the molecular oxygen content in the intestine through providing the birds with treated water containing higher an increased level of dissolved oxygen alters the balance of flora in favor of the beneficial bacteria, thereby improving bird health and performance. By reducing the numbers of strict anaerobes in the gut of the growing bird, the risk of infectious disease, and hence morbidity and mortality are reduced. This allows the beneficial bacteria to proliferate thereby enhancing the digestion and absorption of available nutrients to the bird. The net effect of encouraging the beneficial bacteria, such as Lactobacilli, and suppressing the pathogenic bacteria such as *Salmonella*, *Shigella*, *Staphylococcus*, *Escherichia coli*, *Clostridium* and *Helicobacter pylori*, is greater body weight and improved feed efficiency and healthier animals with fewer antibiotics. The system includes a water treatment filter, a flow meter that coordinates with a flow switch and an electrocatalytic cell coupled to a holding chamber that is attached to an outlet of the cell.